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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/840,637	04/23/2001	Robert Edward Burrell	53-01	3974	
75	590 01/15/2002				
GREENLEE WINNER and SULLIVAN, P.C.			EXAMINER		
5370 Manhattar Suite 201	n Circle		PAK, JOHN D		
Boulder, CO 8	30303		ART UNIT	PAPER NUMBER	
			1616	$\bigcap$	
			DATE MAILED: 01/15/2002	6	

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

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## Office Action Summary

Application No. 09/840,637

Applicant(s)

BURRELL et al.

Examiner

Pak, J.

Art Unit 1616

The MAILING DATE of this communication appear	ars on the cover sheet with the correspondence address
Period for Reply	
A SHORTENED STATUTORY PERIOD FOR REPLY IS S THE MAILING DATE OF THIS COMMUNICATION.	SET TO EXPIRE3 MONTH(S) FROM
- Extensions of time may be available under the provisions of 37 after SIX (6) MONTHS from the mailing date of this commu	7 CFR 1.136 (a). In no event, however, may a reply be timely filed
- If the period for reply specified above is less than thirty (30) d	lays, a reply within the statutory minimum of thirty (30) days will
	ory period will apply and will expire SIX (6) MONTHS from the mailing date of this
	, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). the mailing date of this communication, even if timely filed, may reduce any
earned patent term adjustment. See 37 CFR 1.704(b).	
Status  1) Responsive to communication(s) filed on	·
_	action is non-final.
3) Since this application is in condition for allowand closed in accordance with the practice under Ex	ce except for formal matters, prosecution as to the merits is parte Quayle, 1935 C.D. 11; 453 O.G. 213.
Disposition of Claims	
4) 💢 Claim(s) <u>1-12</u>	is/are pending in the application.
4a) Of the above, claim(s)	is/are withdrawn from consideration.
5)	is/are allowed.
6) X Claim(s) 1-12	is/are rejected.
7)	is/are objected to.
8) Claims	are subject to restriction and/or election requirement.
Application Papers	
9)  The specification is objected to by the Examiner	
10) The drawing(s) filed on is/	are objected to by the Examiner.
11) The proposed drawing correction filed on	is: a) □ approved b) □ disapproved.
12) $\square$ The oath or declaration is objected to by the Exa	aminer.
Priority under 35 U.S.C. § 119	
13) $\square$ Acknowledgement is made of a claim for foreign	n priority under 35 U.S.C. § 119(a)-(d).
a) $\square$ All b) $\square$ Some* c) $\square$ None of:	
1. $\square$ Certified copies of the priority documents h	have been received.
2.  Certified copies of the priority documents h	have been received in Application No
<ul> <li>3.          Copies of the certified copies of the priority application from the International But See the attached detailed Office action for a list of</li> </ul>	
14) Acknowledgement is made of a claim for domes	
Attachment(s)	
15) Notice of References Cited (PTO-892)	18) Interview Summary (PTO-413) Paper No(s).
16) Notice of Draftsperson's Patent Drawing Review (PTO-948)	19) Notice of Informal Patent Application (PTO-152)
17) X Information Disclosure Statement(s) (PTO-1449) Paper No(s)5	20) Other:

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Claims 1-12 are pending in this application.

Claims 3, 5, 6, 9, 10, 11, 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "nanocrystalline" is indefinite because the specification indicates size parameters but states exclusion of such size parameters when used as a powder. This is confusing.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 95/13704 in view of CN 1262093 (abstract supplied by applicant).

WO 95/13704 discloses a fine grain antimicrobial material, having a grain size less than 200 nm, characterized by sufficient atomic disorder such that a sustained release of material, viz. metals such as Ag, Au, Pt, Pd, provide a localized antimicrobial effect when in contact with an alcohol or water electrolytes. See claims 47, 49 et seq.

CN 1262093 is cited to establish that silver disinfectant particles are known to be used to treat a core.

Therefore, the claimed invention, as a whole, would have been <u>prima facie</u> obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention has been fairly suggested by the combined teachings of the cited references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John D. Pak whose telephone number is 308-4538. The

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examiner can normally be reached on Monday through Thursday from 8 AM to 5:30 PM.

The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jose Dees, can be reached on (703) –308-4628. The fax phone number for the organization where this application or proceeding is assigned is 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-1235.

Pak/LR

January 2, 2002

JOHN PAK PRIMARY EXAMINER GROUP 1600

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